Erratum: Double-resonance frequency shift in a hydrogen maser [Phys. Rev. A 62, 063405 (2000)]

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We wish to clarify an inconsistency in our notation where we have defined the term $\mathbf{H}_C$ in two different ways. In Sec. II, we have written the microwave cavity field as

$$\mathbf{H}(\mathbf{r},\omega)=\sqrt{4\pi}p_C(\omega)\mathbf{H}_C(\mathbf{r}). \tag{1}$$

Here, the amplitude and time dependence of the field are included in $p_C(\omega)$, whereas $\mathbf{H}_C$ is merely an orthonormal vector describing the spatial variation of the field.

On the other hand, in Sec. III and Sec. IV, we have defined the microwave cavity field as

$$\mathbf{H}(\mathbf{r},t)=\mathbf{H}_C(\mathbf{r})\cos(\omega t). \tag{2}$$

Here, $\mathbf{H}_C$ represents the time-independent amplitude of the microwave cavity field. With this definition, the amplitude of the coupling between states $|2\rangle$ and $|4\rangle$ would be given by $H_{24}=\langle 2|\hat{\boldsymbol{\mu}}\cdot\mathbf{H}_C|4\rangle$. The couplings to the dressed states (H_{4a}, H_{4b}, and H_{4c}) are similarly defined.

